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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,103	05/16/2005	Zvi Ben-Shalom	1076-1009.1	3580

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EXAMINER

FREAY, CHARLES GRANT

ART UNIT	PAPER NUMBER
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3746

NOTIFICATION DATE	DELIVERY MODE
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09/15/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

daniel@dkpat.co.il
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Office Action Summary	Application No. 10/535,103	Applicant(s) BEN-SHALOM ET AL.	
	Examiner Charles G. Freay	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-19,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) 2-4 and 14 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12 and 13 is/are allowed.
- 6) ☒ Claim(s) 1,5,7-11,15-19,21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to the Amendment of June 3, 2009. In making the below objections and/or rejections the examiner has considered and addressed each of the applicant's arguments.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 5, 7, 9-11, 15 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jess (USPN 4,155,362) in view of Dockum et al (USPN 4,014,318).

Jess discloses a pump for generating fluid flow in an elastic tubular conduit 14 comprising multiple adjacent valve elements 42 in Fig. 4 which are positioned adjacent to the conduit. The conduit is placed in a sleeve 41 and the valve heads (the distal ends abutting the tube) are configured to alternate between a first position in which the tube is unobstructed to a second position in which the tube is obstructed. There is a driver 40 which is configured to control the positions of the valve head so as to execute a temporo-spatial array (note col. 5 lines 43-47). There is also an anti-free-flow clamp mechanism 18 which prevents fluid flow when and until the tubing is inserted in the pump. In col. 4 lines 33-40 Jess teaches of using electric circuitry for controlling the drive of the device. Jess does not specifically state that the valves are electrically operated, that there are plural pumps in either parallel or series arrangement or that the valve heads are oblique to the conduit. Dockum et al discloses a pump (see particularly Figs. 1, 3, 6a, 7 and 12) having four electrically operated valves 12, 14, 16, 17 connected by an electrical cable 42, 44 to a controller 56. The driver in the form of an electromagnet 40, 46 is controlled by the controller 56 to have a temporo-spatial array and Fig. 7 discloses the use of plural pumps. In Dockum part of the surface of the valve 156 shown in Figs. 11 and 15 is oblique to the conduit. At the time of the invention it

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would have been obvious to one of ordinary skill in the art to utilize an electrically actuated drive and oblique valve head substituted for the valve heads of Jess as a well known and precisely controlled valve head and drive arrangement.

With regards to claims 10 and 11 the examiner notes that the applicant did not challenge the examiner's taking of official notice that connecting multiple pumps in series and/or in parallel is well known. This is taken as an admission that these features are prior art. At the time of the invention one of ordinary skill in the art would have found it obvious to mount the pumps in such arrangements in order to create either greater flow or greater pressure.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jess in view of Dockum et al as applied to claim 1 above, and further in view of Upton.

As set forth above Jess in view of Dockum et al discloses the invention substantially as claimed but does not disclose the use of batteries to provide a power source. Upton discloses a similar sequential pumping system which is electrically actuated and utilizes a battery (col. 5 line 37) as a power source. At the time of the invention it would have been obvious to one of ordinary skill in the art to provide a battery as taught by Upton to the Jess tubular pump as a back up power supply.

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jess in view of Dockum et al as applied to claim 1 above, and further in view of Brown (USPN 4,741,736).

As set forth above Jess in view of Dockum et al discloses the invention substantially as claimed but does not disclose a control panel detachable from the rest of the pump and communicating with the pump through a cable. Brown in Fig. 1 discloses a control panel 30 having a cable and being detachable from the rest of the pump 10. At the time of the invention it would have been obvious to one of ordinary skill in the art to provide the controller and pump of Jess in view of Dockum et al with a detachable control panel as taught by Brown in order to allow remote programming of the pump and also allow for the control panel to be removed so that the pump is simpler and easier to handle and transport.

Claims 8, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jess in view of Dockum et al and Brown as applied to claim 16 above, and further in view of Franetzki et al (USPN 4,270,532).

As set forth above Jess in view of Dockum et al and Brown discloses the invention substantially as claimed but does not disclose a control panel communicating wirelessly through a transceiver. Franetzki et al disclose a controller 1,6 having a control panel 2 and a transmitter 11 which wirelessly communicates with a pump 13. At the time of the invention it would have been obvious to one of ordinary skill in the art to utilize a controller such as taught by Franetzki et al in the Jess in view Dockum et al and Brown device in order to allow for remote control of the pump from an extended distance.

With regards to claim 19 Franetzki et al does not disclose a transceiver (i.e. a transmitter and a receiver in one unit). The examiner notes that the applicant did not challenge the examiner's taking official notice that transceivers are well known wireless communication devices. This is taken as an admission that this feature is prior art. At the time of the invention one of ordinary skill in the art would have found it obvious to substitute a transceiver for the transmitter of Franetzki et al in order to allow for two-way communication and thus allow the controller to receive information from the pump unit such as remaining battery life, the amount of fluid left in the reservoir, etc..

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jess in view of Dockum et al as applied to claim 21 above, and further in view of Haber et al (USPN 5,257,978).

As set forth above Jess in view of Dockum et al discloses the invention substantially as claimed but does not disclose that the anti-free flow device includes a sleeve containing a portion of the tube, a lever and a spring. Haber et al discloses an anti-free flow device having a sleeve 74, a lever 18, 22 and 24 and having a spring 20 as claimed. At the time of the invention it would have been obvious to one of ordinary skill in the art to substitute an anti-free flow device of Haber et al for the device of Jess since it allows the closing of the door to actuate the anti-free flow device.

Allowable Subject Matter

Claims 12 and 13 are allowed.

Response to Arguments

Applicant's arguments with respect to claims 1, 5, 7, 9-11, 15-19, 21 and 22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles G. Freay whose telephone number is 571-272-4827. The examiner can normally be reached on Monday through Friday 8:30 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on 571-272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles G Freay/
Primary Examiner
Art Unit 3746

CGF
September 10, 2009